

CURRICULUM VITAE**Philip Shaw, B.M. B.Ch. (Medicine), Ph. D**

Earl Stadtman Investigator,
 Head, Neurobehavioral Clinical Research Section,
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Education

<u>Institution</u>	<u>Year</u>	<u>Degree</u>
Oxford University, England	1989	B.A.(Hons) Experimental Psychology
Oxford University, England	1994	B.M. B.Ch. (Medicine)
King's College London, England	2006	PhD. Psychological Medicine

Professional Societies

Member of the Royal College of Psychiatrists (UK), 1998- present

Member of the Royal College of Physicians (UK), 2001-present

Membership of the Royal Colleges is by examination and follows 3 years of residency training in each specialty. It is regarded as the equivalent of Board Membership in the US.

Maryland State Medical License #D-48403

Scholarly Societies

Member of the American College of Neuropsychopharmacology (elected 2008)

Member of the British Neuropsychiatry Association (elected 1999)

Member of the American Academy of Child and Adolescent Psychiatry (joined 2007)

Professional positions

1994-1998	Residency Training in Internal Medicine: National Hospital for Neurology and Neurosurgery (Neurology); Hammersmith Hospital (Clinical Pharmacology, Cardiology); Royal Free Hospital (Infectious diseases, H.I.V. medicine)
1998-2001	Residency Training in Psychiatry: Maudsley and King's College Hospitals, London.
1999-2001	Fellowship in Child Psychiatry at the New Children's Hospital, Sydney, Australia.
2001-2004	Lecturer in Neuropsychiatry, Institute of Psychiatry, London.
2004-2011	Clinical Research Fellow and then Staff Clinician, Child Psychiatry Branch, National Institute of Mental Health.
2008-present	Member of the Consulting and Liaison Psychiatry Service to the Clinical Center of the National Institutes of Health.
2011-present	Earl Stadtman Investigator, Social and Behavioral Research Branch, National Human Genome Research Institute.

Honors and awards

2012	Finalist in the Ziskind-Somerfield Award of the Society of Biological Psychiatry
2010	Earl Stadtman Award (national search for Tenure Track candidates at NIH)
2008	Director's Award, National Institute of Mental Health.
2006	Fellows' Award for Research Excellence, National Institutes of Health.
2004	Twice awarded prize for best original research paper at British Neuropsychiatry Association Conference.
2000	Laughlin Prize for highest marks in MRCPsych examinations.
1994	Gold Medal in the Mental Health Foundation Essay Prize.
1990-1991	Pre-Clinical Advisor's Scholar at Oxford University Medical School.
1987-89	Scholar in Experimental Psychology, St Anne's College, Oxford.
1989	University and College Awards for Congratulatory First.
1986	Rouse Memorial Award for Highest Marks in Preliminary Exam in Psychology, Physiology and Philosophy

Bibliography

Peer-reviewed publications (* manuscripts since joining NHGRI)

*Shaw, P., Stringaris, A., Nigg, J., & Leibenluft, E. (2014) *Emotion dysregulation in Attention Deficit Hyperactivity Disorder*. American Journal of Psychiatry. 171(3): 276-293. Featured on journal cover.

*Shaw, P., Sharp, W., Sudre, G., Wharton, A., Greenstein, D., Raznahan, A., Rapoport, J. (2014). *Subcortical and cortical morphological anomalies as an endophenotype in obsessive-compulsive disorder*. Molecular Psychiatry. doi: 10.1038/mp.2014.3

*Shaw P, De Rossi P, Watson B, Wharton A, Greenstein D, Raznahan A, Sharp W, Lerch JP, Chakravarty MM (2014). *Mapping the Development of the basal ganglia in children with Attention-Deficit/Hyperactivity Disorder*. J Am Acad Child Adolesc Psychiatry. 53(6):780-789

*Sudre G (joint first), Shaw P (joint first), Wharton A, Weingart D, Sharp W, Sarlls J (2014) *White matter microstructure and the variable adult outcome of childhood Attention Deficit Hyperactivity Disorder*. Neuropsychopharmacology ; Advance on-line publication: doi: 10.1038/npp.2014.241.

*Raznahan A, Shaw P, Lerch JP, Clasen LS, Greenstein D, Berman R, Pipitone J, Chakravarty MM, Giedd JN (2014). *Longitudinal four-dimensional mapping of subcortical anatomy in human development*. Proceedings of the National Academy of Sciences. 111:1592-1597.

*Shaw, P., Malek, M., Watson, B., Greenstein, D., de Rossi, P., & Sharp, W. (2013). *Trajectories of cerebral cortical development in childhood and adolescence and adult attention-deficit/hyperactivity disorder*. Biological Psychiatry, 74(8), 599-606 Featured on journal cover and subject of editorial.

*Shaw P, Malek M, Watson B, Sharp W, Evans A, Greenstein D (2012). *Development of cortical surface area and gyrification in Attention-Deficit Hyperactivity Disorder*. Biological Psychiatry 72(3) 191-197. Priority communication and featured on journal cover.

*Shaw P, Gilliam M, Malek M, Sharp W, Giedd J. (2012). *Parental age effects on cortical morphology in offspring*. Cerebral Cortex 22(6): 1256-1262

*Wallace GL, Shaw P, Lee NR, Clasen LS, Raznahan A, Lenroot RK, Martin A, Giedd JN (2012) *Distinct Cortical Correlates of Autistic versus Antisocial Traits in a Longitudinal Sample of Typically Developing Youth*. Journal of Neuroscience 32:4856-60

*Mallar Chakravarty M, Steadman P, van Eede MC, Calcott RD, Gu V, Shaw P, Raznahan A, Louis Collins D, Lerch JP (2012) *Performing label-fusion-based segmentation using multiple automatically generated templates*. Human Brain Mapping.

Shaw P, M Gilliam, M Malek, W Sharp, M Liverpool, C Weddle, Greenstein D, Evans A, Giedd, JN, Rapoport J (2011). *Cortical development in typically developing children with symptoms of hyperactivity and impulsivity: support for a dimensional view of Attention-Deficit Hyperactivity Disorder*. American Journal of Psychiatry 168: 143-151

Gilliam M, Stockman M, Malek M, Sharp W, Greenstein D, Lalonde F, Clasen L, Giedd J, Rapoport J, Shaw P. (2011) *Developmental Trajectories of the Corpus Callosum in Attention-Deficit/Hyperactivity Disorder*. Biological Psychiatry. 69: 839-846

Peer-reviewed publications continued:

- Elia J, Glessner JG, Wang K, Takahashi N, Shtir CJ, Hadley D., Shaw P, Devoto M, White PS.... Hakonarson H. (2011) *Genome Wide Copy Number Variation Study Associates Metabotropic Glutamate Receptor Gene Networks with Attention Deficit Hyperactivity Disorder*. Nature Genetics, 44: 78-84
- Raznahan A, Shaw P, Lalonde F, Stockman M, Wallace G, Greenstein D, Clasen L, Gogtay N, Giedd J. (2011). *How does your cortex grow?* Journal of Neuroscience 31: 7174-7177
- Raznahan A, Lerch JP, Lee N, Greenstein D, Wallace GL, Stockman M, Clasen L, Shaw PW, Giedd JN (2011). *Patterns of coordinated anatomical change in human cortical development: a longitudinal neuroimaging study of maturational coupling*. Neuron 72:873-84.
- Shaw P, Gogtay N, Rapoport JL (2010). *Childhood neuropsychiatric disorders as anomalies in neurodevelopmental trajectories*. Human Brain Mapping 31 (6) 917-925.
- Shaw P, Wallace G, Evans A, Rapoport J, Giedd J (2009). *Effects of the Val¹⁵⁸Met catechol-o-methyltransferase (COMT) polymorphism on cortical structure in children and adolescents*. Molecular Psychiatry 14, 348-349.
- Shaw P, Lalonde F, Lepage C, Rabin C, Eckstrand K, Sharp W, Greenstein D, Evans A, Giedd J, Rapoport J (2009). *The development of cortical asymmetry in typically developing children and its disruption in attention-deficit/hyperactivity disorder*. Archives of General Psychiatry; 66(8):888-96.
- Shaw P, Sharp W, Morrison M, Eckstrand, K, Greenstein D, Clasen, L, Evans A, Rapoport, JL (2009). *Psychostimulant treatment and the developing cortex in attention deficit hyperactivity disorder*. American Journal of Psychiatry (166), 58-63.
- Shaw P, Kabani NJ, Lerch JP, Eckstrand K, Lenroot R, Gogtay N, Greenstein D, Clasen L, Evans A, Giedd J, Rapoport JL (2008). *Neurodevelopmental trajectories of the human cerebral cortex*. Journal of Neuroscience 28 (14), 3586-94
- Shaw P, Lerch J, Pruessner J, Taylor K, Rose A, Greenstein D, Clasen L, Evans A, Rapoport J, Giedd J (2007). *Cortical morphology in children and adolescents with different apolipoprotein E gene polymorphisms: an observational study*. Lancet Neurology 6(6); 494-500.
- Shaw P, Lerch J, Greenstein D, Sharp W, Clasen L, Evans A, Giedd J, Castellanos FX, Rapoport J (2007). *Polymorphisms of the dopamine D4 receptor, clinical outcome and cortical structure in attention-deficit/ hyperactivity disorder*. Archives of General Psychiatry .64(8): 921-931.
- Mackie S, Shaw P, Lenroot R, Pierson R, Greenstein D, Nugent T, Sharp W, Giedd J, Rapoport J (2007), *Cerebellar Development and Clinical Outcome in Attention Deficit/ Hyperactivity Disorder*. American Journal of Psychiatry 164 (3); 647-655.
- Shaw P, Eckstrand K, Lerch J, Greenstein D, Clasen L, Blumenthal J, Evans A, Giedd J, Rapoport JL (2007) *Attention-deficit/hyperactivity disorder is characterized by a delay in cortical maturation*. Proceedings of the National Academy of Science 104(49): 19649-54.

Peer-reviewed publications continued:

Shaw P (2007) *Intelligence and the developing human brain*. BioEssays 29(10): 962-973.

Shaw P, Greenstein D, Lerch J, Clasen L, Lenroot R, Evans A, Rapoport J and Giedd J.(2006) *Intellectual ability and cortical development in children and adolescents*. Nature. 440 (7084), 676-679.

Shaw P, Lerch J, Greenstein D, Sharp W, Clasen L, Evans A, Giedd J, Castellanos FX, Rapoport J (2006). *Longitudinal mapping of cortical thickness and clinical outcome in children and adolescents with attention deficit/hyperactivity disorder*. Archives of General Psychiatry 63(5): 540-549.

Shaw P, Sporn A, Gogtay N, Nicolson R, Overman G, Greenstein D, Gochman P, Tossell J, Lenane J, Rapoport JL (2006). *Childhood-onset schizophrenia. A double-blind, randomized clozapine-olanzapine comparison*. Archives of General Psychiatry 63(7): 721-730.

Addington AM, Gornick MC, Shaw P, Seal JL, Gogtay N, Greenstein D, Clasen L, Coffey M, Gochman PA, Long R, Rapoport J (2006). *Neuregulin 1 (8p12) and childhood-onset schizophrenia: susceptibility haplotypes for diagnosis and brain developmental trajectories*. Molecular Psychiatry: 14, 1-11.

Seal JL, Gornick MC, Gogtay N, Shaw P, Greenstein DK, Coffey M, Gochman PA, Stromberg T, Chen Z, Merriman B, Nelson SF, Brooks J, Arepalli S, Wavrant-De Vrieze F, Hardy J, Rapoport JL, Addington AM (2006), *Segmental uniparental isodisomy on 5q32-qter in a patient with childhood-onset schizophrenia*. Journal of Medical Genetics: 43, 887 - 892.

Greenstein D, Lerch J, Shaw P, Clasen L, Giedd J, Gochman PA, Rapoport J, Gogtay N (2006), *Childhood onset schizophrenia: cortical brain abnormalities as young adults*. Journal of Child Psychology and Psychiatry: 40, 1003-1012.

Lawrence E.J., Shaw P., Giampietro, V.P, Surguladze, S., Brammer, M.J and David, A.S. (2006). *The Role of 'Shared Representations' in Social Perception and Empathy: An fMRI study*. Neuroimage. 29, 1173-1184.

Shaw P, Lawrence EJ, Bramham J, Brierley B, Radbourne C, David AS (2006). *A prospective study of the effects of anterior temporal lobectomy on emotion recognition and theory of mind*. Neuropsychologia 45 (12), 2783.

Cutter WJ, Daly EM, Robertson DM, Chitnis XA, van Amelsvoort TA, Simmons A, Ng VW, Williams BS, Shaw P, Conway GS, Skuse DH, Collier DA, Craig M, Murphy DG. (2006). *Influence of X chromosome and hormones on human brain development: a magnetic resonance imaging and proton magnetic resonance spectroscopy study of turner syndrome*. Biological Psychiatry: 59(3), 273-283.

Shaw P, Brierley B and David AS (2005). *A critical period for the impact of amygdala damage on the emotional enhancement of memory?* Neurology 65:326-328.

Shaw P, Bramham J, Lawrence EJ, Morris R, Baron-Cohen S and David AS (2005). *Differential effects of lesions of the amygdala and prefrontal cortex on recognizing facial expressions of complex emotions*. Journal of Cognitive Neuroscience 17:1410-1419, 2005.

Peer-reviewed publications continued:

Gochman PA, Greenstein D, Sporn A, Gogtay N, Keller B, Shaw P, Rapoport JL (2005) *IQ stabilization in Childhood-Onset Schizophrenia*. Schizophrenia Research: 77, 271-277.

Lerch JP, Worsley K, Shaw P, Greenstein D, Giedd J, Evans, JC. *Cross cortical correlations using cortical thickness from MRI* (2005). Neuroimage: 31(3), 993-1003.

Lawrence E.J., Shaw P, Baker D, Baron-Cohen S and David AS (2004) *Measuring empathy- the reliability and validity of the empathy quotient*. Psychological Medicine: 34(5), 911-920.

Shaw P, Lawrence EJ, Radbourne C, Bramham J, Polkey CE., David AS (2004) *The impact of early and late damage to the human amygdala on 'theory of mind' reasoning*. Brain. 127(7):1535-48.

Shaw P, Mellers J, Henderson M, Polkey AC, David AS and Toone B (2004) *Psychosis following temporal lobectomy: phenomenology, timing and risk factors*. Journal of Neurosurgery, Neurology and Psychiatry 75(7):1003-8.

Brierley B, Shaw P and David A.S. (2003). *The human amygdala: a systematic review and meta-analysis of volumetric MRI*. Brain Research Reviews: 39 (1), 84-105

Shaw P, Lawrence E, Baron-Cohen S and David A.S. (2003) *The role of the amygdala in social sensitivity*. Annals of the New York Academy of Science 985 508-510.